



The Minuteman Repeater Association

The Minuteman

Volume 38, Number 4

March 2009



Membership Meeting ~ Thursday, 5 March 2009 @ 7:30 PM
Joint meeting with the Framingham Amateur Radio Association (FARA).
Miles Mann, WF1F, will tell us about Slow Scan Television
on the International Space Station
Talk in — 147.27

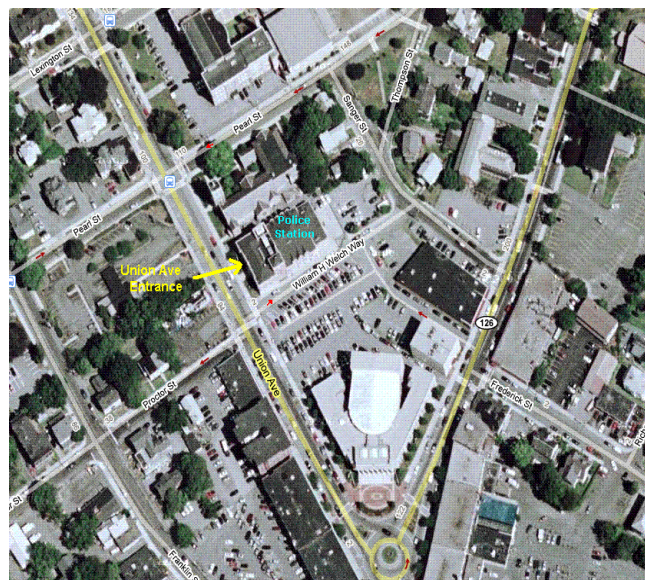
At the Framingham Police Station: 1 William Welch Way (corner of William Welch Way and Union Ave) in the first floor training room. Enter through the front door on Union Ave. and the room is to the left. Directions at <http://www.mmra.org/dir/fpd.html>

From the East

1. Take the Mass Pike/I-90 West to Exit 13, Rt 30
2. Take Rt 30 W to Rt 126, turn left (south)
3. Cross over the route 9 bridge, go 1.3 miles, turn right on Sanger St.
4. Police station is just up the road on your left.

From the West

1. Take the Mass Pike/I-90 East to Exit 12, Rt 9. Go about 1.9 miles and exit right at Edgell St/ Main St ramp.
2. At the light, turn right onto Main St.
3. After 1/2 mile, bear right onto Union Ave.
4. Follow Union ave approximately 1.5 miles, police station will be on your left.



**US Mail Newsletter to cost \$10/year
starting now for all new members, and
for all renewing members in
September 2009**

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About the Minuteman Repeater Association

The Minuteman Repeater Association (MMRA) is dedicated to Amateur Radio and public service. The MMRA maintains a large system of repeaters in Eastern Massachusetts.

The MMRA meets (usually) on the 3rd Wednesday of September, November, January, March, and May. Meeting time, locations and talk-in frequency vary. These are announced in the newsletter and on weekly nets. Meetings are open to all interested parties.

The Minuteman newsletter is mailed one week before each meeting. Members are encouraged to submit articles. Articles may be sent to the editor via email to newsletter@mmra.org. The deadline for articles is the last Friday of the month preceding the meeting.

Each Tuesday evening at 8PM the MMRA links most of the repeaters for an open net. The topic is "Technical Information and Other Stuff". Join us!

Membership in the MMRA is open to all radio amateurs. Annual dues are \$25 per individual or \$35 per family. See our website for details.

Email to the club leadership should be sent to contact@mmra.org. The MMRA maintains a web site at: <http://www.mmra.org/>

An email distribution list for club members named "MMRA" is at: www.yahogroups.com/

No part of this newsletter can be copied or posted elsewhere without prior approval from the club. Your cooperation in this matter is appreciated.

MMRA QRM Policy

MMRA members and all other operators are strongly encouraged to report repeater activity that does not abide by Part 97 rules or accepted amateur radio practice to the board of directors at contact@mmra.org or via other means.

The most effective (and probably the only effective) way to deal with an individual causing QRM is to NOT engage that individual on the air. Please include the time and date of any incident. Measures are being taken to make audio recordings of repeater activity.

Repeater and Frequency Information

Location	MHz	PL	Call	Linking	
				To Hub 1	To Hub 2
MMRA Voice Repeaters					
Marlborough	53.810	71.9	W1BRI	PTL	—
Marlborough	145.160	—	W1MRA	D-Star	
Belmont	145.430	67.0	WA1RTT	—	—
Mendon	146.610	146.2	N1BHI	FTL	PTL
Quincy	146.670	146.2	W1BRI	PTL	PTL
Burlington	146.715	146.2	N1NVL	PTL	PTL
Weston	146.790	146.2	N1BE	PTL FTL Hub2 10-4	PTL
Brookline	146.820	146.2	K5TEC	FTL	PTL
Marlborough	147.270	146.2	W1MRA	PTL	PTL
Hopkinton	223.940	103.5	N1BHI	FTL	—
Quincy	224.400	103.5	N1KUG	FTL	PTL
Weston	224.700	103.5	N1NOM	FTL	PTL
Marlborough	224.880	103.5	W1MRA	PTL	FTL
Weston	442.700	88.5	W1MRA	Network Hub 2 (PTL to Hub 1)	
Burlington	446.775	88.5	W1DYJ	FTL	PTL
Southborough	449.575	88.5	W1BRI	PTL	—
Marlborough	449.925	88.5	W1MRA	Network Hub 1	
Affiliated Voice Repeaters					
Bolton	29.620	131.8	W1OJ	—	FTL
Norwell	145.250	77.0	AC1M	PTL	PTL
Coventry RI	145.370	67.0	N1JBC	PTL	—
Norwell	443.600	88.5	NS1N	PTL	PTL
Milford	446.825	100.0	WA1QGU	—	—
Marlborough	447.875	136.5	K1IW	Linked to 6M	
Mt. Wachusett	448.625	88.5	W1OJ	—	FTL
Marlborough	927.700	131.8	K1IW	Linked to 6M	
MMRA “Other” Systems					
Marlborough	144.390	none	W1MRA	APRS Digipeater	
???	145.630	146.2	W1MRA	Fox Box	
Internet	Echolink node 94940				
	IRLP node 4133				

Notes: FTL = Full Time Linked (or default state)
PTL = Part Time Linked (on schedule or demand)
Note — a repeater can be linked to only one Hub at a time.

PL: PL is required to prevent interference. The code **750** will temporarily disable the MMRA PL on the 2M repeaters.

Autopatch: Only the Hub 1 has a telephone line. Link to Hub 1 if necessary, then bring up the autopatch using the 449.925 autopatch codes.

Control codes are sent to members upon receipt of dues.

MMRA January Membership Meeting

Bob Evans — N1BE — Clerk

We met in the meeting room of the Westborough library. This was well attended with about 31 people present. President K1IW, Bob, opened the meeting with a brief status report on a few repeaters:



- The Slygo Hill water tower work is delayed but still planned. The 147.27 antenna has high SWR and TDR indicates a possible short at the far end of the cable. Since this repeater is working fairly well with reduced power, MMRA is not paying for an insured tower climber to perform the repair. We believe site renovations by Marlborough will include moving all antennas, so we expect to be able to do any necessary repairs as part of that activity. Action by the MMRA is delayed until Marlborough's plans are better defined, particularly the timeframe for site work.
- In Brookline 146.82 has very poor receive sensitivity. The board has not determined the cause or best solution but expect a better duplexer or circulator would resolve this problem. In the following motion, funding sufficient for one of these was approved by the membership: K1IW moved that up to \$1500.00 be spent to improve reception by the 146.82 repeater, pending technical data received and MMRA board approval based on review of that data. KK1X seconded this motion and it passed unanimously.

Bryan, W1BRI, mentioned that Quincy is starting to consider renovations to the water tower that houses WUMB and two MMRA repeaters. It is early in the process so we know little about schedule and ultimate impact to MMRA.

John Frye, N1OTY, gave a three part talk on getting on the 902MHz FM ham band as



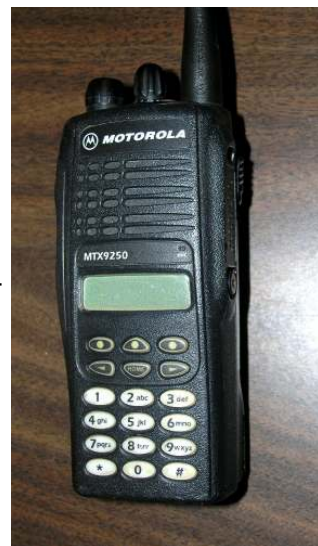
the main event of this meeting. Because one cannot simply go to HRO and buy a 902MHz FM radio, the introductory section covered



commercial radios that work on 902MHz. John gave us information to distinguish radios that convert easily to 902 MHz, mostly Motorola and some Kenwoods. These radios were designed for Public Safety or Business usage.

Converting these radios to Amateur frequencies requires moving both transmit and receive frequencies, and reduces the split. (The nesmc.org 902 bandplan shows 12MHz and 25MHz splits.) These conversions can be easy, just reprogramming the radio. Sometimes a circuit modification is necessary. Sometimes both.

The remaining sections focused on two Motorola families: GTX and MCS2000/MTS2000, with details about models / features, typical costs, conversion details, programming cables and software.



With the possibility of picking up a radio for less than \$100 and the easy conversion, there is much interest in getting on 902 MHz FM. For more details, you can view N1OTY's slides. These have been posted to the MMRA web site.

John's slides from the meeting are available on the MMRA website, at <http://www.mmra.org/902>.

Monthly Eastern Massachusetts Section News Summary

ARRL Section Manager: Michael P. Neilsen, W1MPN

Hello all stations and most cordial greetings. The following are my monthly comments, reflecting a summary view of the important events of the past month, and some "heads-up" notice for events in the current month.

Last month, your section staff had its first meeting at a local Boston restaurant. We spent the meeting becoming better acquainted and discussing implementing my campaign agenda. There are no minutes to this meeting since you are already familiar with the plans, but minutes of future meetings will be posted on our section website at <http://ema.arrl.org>. Please also be advised that our SEC, STM, and SGL, have sites of their own reachable by links in the bottom left column on our site.

Speaking of which, I'd like to remind you about our website which summarizes happenings around the section and in our clubs, and is updated frequently. It also shows upcoming events for your scheduling convenience. We also list speakers and testing venues. Feel free to contact our ACC, WA1QYM, concerning coordinating support for speakers for your future meeting. If you would like additional publicity about your club activities, please contact our webmaster, Phil, K9HI, through the site. I, or anyone on my staff, would be pleased to visit (and present) at your club, just ask!

Two potentially contentious issues arose last month; amateur radio support for the change to "on-air" digital television, and the proposed bills in our legislature concerning, if I may coin an expression, "driving while communicating". With respect to the digital TV conversion, the ARRL issued a policy statement (on our website) stating categorically that hams are at the same time not obligated to do installations, nor can accept funds if they do as representatives of the ARRL. I do recommend, however, neighborly interaction where your communication expertise can go a long way to clear up misinformation about this matter.

The proposed legislation is a more serious problem. Our representatives understandably want to do something about the growing problem of traffic accidents blamed on drivers distracted by cell phone and text communications. SGL, K3HI, is doing a terrific job monitoring this and his comments about it can be found through a link on our website. We'd like to know your thoughts as well. Simply register on our website so your response or blog can be published.

May I take this moment to remind you of important future events. The Marathon is one of the largest public service events and they are looking for ham support. It not too late to register at <http://marc.mmra.org/marc/index.html>. For information on other events, see our website and/or contact Bruce, KC1US, by email at kc1us@mmra.org.

Field Day (last weekend in June) will be here before you know it! We have a separate website for that as well, edited by well known ham, Bill, N1VUX, providing a wealth of information to help you with your planning. Watch for announcements for when the site opens up again for business.

Finally, support may be needed for 2009 Boston Op-Sail event in July. We will keep you posted.

Last month I announced a new tradition for our website called "In their own words". In the piece, one ham will be prominently featured to give us a chance to learn all about him/her, and also enlighten us to other interesting aspects of their lives and personalities. I am honored to announce that Phil, K9HI, will be our first featured ham. His piece will appear on our section website sometime later this month.

73, de W1MPN

MMRA February Board of Directors Meeting

Bob Evans — N1BE — Clerk

The MMRA Board met at 7:00 PM on Feb 11, 2009 at Chin's restaurant in Marlborough. K1IW, K1KWP, N1BDA, N1BE, WA1NVC and W1MPN were in attendance. The following items were discussed.

Marlborough flea market (Feb 14th): WA1NVC and possibly K1IW will man an MMRA table at the Flea. Bob and Roger plan to meet at Weston on Friday afternoon to select items for sale. The board agreed we should sell short lengths of hardline (< 100 ft.).

Repeaters issues:

- Measurements at Brookline showed off-frequency noise from the transmitter (on the Rx input frequency) is getting into the receiver and causing loss of sensitivity. Reconfiguring the duplexer to notch out the Rx frequency from the transmitter output made the situation somewhat better. There still is a problem in the antenna system that is not fully diagnosed. The plan is to replace the LMR feedline with hardline and test substituting a different antenna.
- 10-Meter TX site: We discussed alternative antennas for Weston. We have not yet obtained permission to erect another antenna there.
- 6-Meter TX and MRE: The 53.81 MHz PA needs repair. There also was a proposal to use a gain antenna to replace the current "well aged" one. We also need to trim back vegetation from the antennas at MRE. It would be better to do this before it sprouts leaves in April. Permission from the country club already has been obtained.

Bylaw changes: The board is considering bylaw changes to add provisions for removal of officer, suspension of membership privileges, and rejection of membership applications. These proposals would need to be approved at a vote of the general membership before becoming effective. Stay tuned to the Minuteman Newsletter for more details.

Interference Committee: The board discussed revitalizing the MMRA Interference Committee. Although no specific proposal was suggested, we'll need someone to lead this committee as a first step.

Boston Marathon: K1IW and W3EVE are busy making preparations for this event. About 140 ham volunteers have already offered to assist at this major public service event, but we need about 100 more. *Please volunteer!*

Walk For Hunger: KA1NCF is helping to organize this event, starting with a list of volunteers from previous years.

Treasurer's Report: K1KWP reports both the number of memberships renewed and the amount of dues collected is ahead of last year. We discussed a few active repeater users who have not renewed their prior memberships.

The meeting adjourned at 8:45 PM.

From the ARRL Web Site: ARDF Update ~ Bearings in Beantown USA's 9th ARDF Championships

By Joe Moell, K0OV, ARRL Amateur Radio Direction Finding Coordinator

Every year since 2001, hams and future hams have gathered to see who is best at finding hidden radio transmitters in the forest. Besides ARDF, the sport has other names such as foxhunting, foxtailing and radio-orienteeing.

This year, for the first time, our national championships will take place in the Northeast. Foxhunting fans of all skill levels will gather near Boston June 5-7 for two days of intense competition. Saturday's competition is on 2 meters, while Sunday's is on 80 meters. Early arrivals can have a day of practice and equipment testing on Friday.

For the full story go to: <http://www.arrl.org/news/features/2009/02/10/10639/>

The Amateur's Code

The Radio Amateur is:

CONSIDERATE...never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...offers loyalty, encouragement and support to other amateurs, local clubs, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE...with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY...slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED...radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC...station and skill always ready for service to country and community.

Paul M. Segal, W9EEA, 1928

February Treasurer's Report Kevin Paetzold, K1KWP

Income	Dues	\$5189
	Donations	919
	Misc.	113
	Total	\$6241

Number of members this year	= 181
Number not renewed from last year	= 26

Expenses	Spent to date	\$4317
	Expected expenses	428
	Total	\$4745

Discretionary Funds	\$1496
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President's Message Bob DeMattia, K1IW

Just a few days ago (from when I am writing this article) our federal government passed a \$787B spending bill. It always amazes me how government can unlink spending from revenues. Where this money is going to come from is enough material for a whole other article. For now, I thought it amusing to list a few things that \$787B could buy:

- \$1.2M to every licensed amateur radio operator in the country (as of 2/15/09)
- At \$2/gal, all the gas and diesel used in vehicles in the U.S. for two years.
- At current spending levels, enough money to run the Commonwealth of Massachusetts for thirty years
- Fifty two more Big Dig construction projects
- Red Sox season tickets for every man, woman, and child who lives in Massachusetts, including money for each of them to park a car and buy refreshments at the park - for eleven years (though it would be difficult to fit 7,000,000 people into Fenway at one time!)

If anyone receives a check for \$1.2M, let me know. We're always looking for donations.

Upcoming MMRA Meetings

All meetings start at 7:30 unless otherwise noted.

Date	Location	Feature
Sep 17 7 PM	Weston Public Library	MMRA Virtual Tour
Oct 15	Kennedy's	Board Meeting
Nov 19 7 PM	Burlington Public Lib.	ARRL Update — Mike, K1TWF
Dec 17	Stratus	Board Meeting
Jan 21 7 PM	Westboro Public Lib	902 MHz — John, N1OTY
Feb 11*	Chin's, Marlboro	Board Meeting
Mar 5 *	FARA	SSTV on ISS, Greg, WF1F
Apr 15	Watham-Weston Corp	Board Meeting
May 20	Clay Center	Ron Dankowitz—Latest in Space Science and General Elections

* Not the 3rd Wednesday

MMRA Leaders

President	Bob DeMattia	K1IW
Vice President	Steve Telsey	N1BDA
Secretary	Dan Rajczyk	N1KJN
Treasurer	Kevin Paetzold	K1KWP
Clerk	Bob Evans	N1BE
Technical Officer	Bryan Cerqua	W1BRI
Director 2008-10	Clark Conti	N1NVK
Director 2008-10	Mike Neilsen	W1MPN
Director 2007-09	Steve Schwarm	W3EVE
Director 2007-09	Roger Coulson	WA1NVC
Emergency Coordinator	open	
Net Manager	Larry Banks	W1DYJ
Newsletter Editor	Larry Banks	W1DYJ
Public Service Coordinator	Bruce Pigott	KC1US
VEC Liaison	Bill Wade	K1IJ
Web Page Editor	Bob DeMattia	K1IW

Don't Forget!

Every Tuesday @ 8 PM
Technical, Informational
and Other Stuff Net

The MMRA's repeaters are linked Tuesday nights for the TIAOS Net. Join us! This is a good way to keep up with what is happening in the MMRA and ask your ham related questions.

We need another net control!

If you would like to try your hand at Net Control contact me at W1DYJ@mmra.org – we have a script you can use to start with. This is good practice for a number of ham related operations, from emergency preparedness to contesting.

Current Net Control Operators:

Week 1	WA1JIM	Jimmy Devaire
Week 2	???	OPEN
Week 3	W1DYJ	Larry Banks
Week 4	K1KWP	Kevin Paetzold
Week 5	W1DYJ	Larry Banks

Newsletter Delivery

If you received this via US Mail, you should think about having it sent by eMail. You will receive it earlier, it will be in color, and it may have MORE great content! Send your request to N1KJN@mmra.org.

Starting next year, US Mail delivery of the newsletter will be an additional \$10/year.

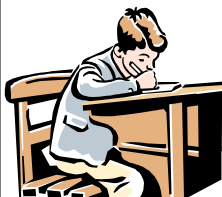
Past Newsletters are available at
<http://www.mmra.org/>

MMRA VE Sessions

3rd Saturday of each Month
 9 AM at the
 Marlboro Public Library
Contact: Bill Wade, K1IJ
 781-891-9079

Evenings 6 to 10 PM,
 Weekends 8 AM to 10 PM.

Accredited by the ARRL VEC



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Miles Mann, WF1F, will tell us about Slow Scan Television
on the International Space Station
Talk in — 147.27

Calendar of Ham Radio Events

Public Service Events

See this web site for contact information

<http://purl.org/hamradio/publicservice/nediv>

Apr 20	Hopkinton MA	Boston Marathon
Apr 26	Groton MA	Groton Road Race
Jul 3	Fitchburg MA	Longsjo Classic
Jul 4	Princeton MA	Longsjo Classic
Jul 5	Fitchburg MA	Longsjo Classic
Jul 25	Devens MA	Memory Ride for Alzheimer's

New England Area Ham - Electronic Flea Markets

See this web site for contact information

<http://mit.edu/w1gsl/Public/ne-fleas>

21 Mar	Pomfret CT	ECARA @CommSch
22 Mar	Southington CT	SARA @HS
28 Mar	Middletown NY	OCARC @Wallkill ComCtr
28 Mar	Lewiston ME	AARC ME Conv @Ramada
29 Mar	Framingham MA	FARA @KeefeSch
29 Mar	Henniker NH	CVRC @CommSch
18 Apr	Manchester NH	NEAntqRC @BingoCtr
18 Apr	S Portland ME	PAWA @AmLegion
18 Apr	Gales Ferry CT	RASON @Firehse
19 Apr	Cambridge MA	FLEA at MIT
26 Apr	Lindenhurst NY	GSBARC
1,2 May	Deerfield NH	NearFest @FG
9 May	Lindenhurst NY	GSBARC @FiremanPk
9 May	Rensselaer NY	EGARA
30 May	Goshen CT	SoBerksARC @Fairground
13 Jun	Windsor CT VR+C Mus	115 Pierson LN
14 Jun	Queens NY	HoSARC
8 Aug	Gales Ferry CT	RASON @VFD

THE MINUTEMAN REPEATER ASSOCIATION

MMRA
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Email: contact@mmra.org



WE'RE ON THE WEB
[HTTP://WWW.MMRA.ORG/](http://www.mmra.org/)
